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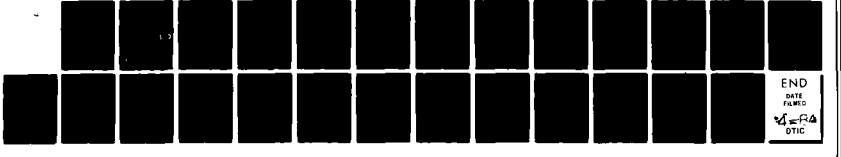

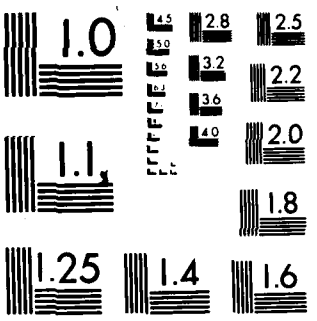

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Report CO-ONR-010

SOCIAL SUPPORT AND PERFORMANCE IN COMPLEX ORGANIZATIONS

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Final Report

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This is the Final Report of a research project carried out between June 1, 1980 and December 31, 1983. Nine technical reports and fourteen articles resulted from the project. The research dealt with social support, its assessment, relationship to performance, and stability over time. The findings showed that social support is related to performance, interpersonal skills and relationships in a complex organization. Social support provided in a performance situation was found to be especially helpful for individuals who

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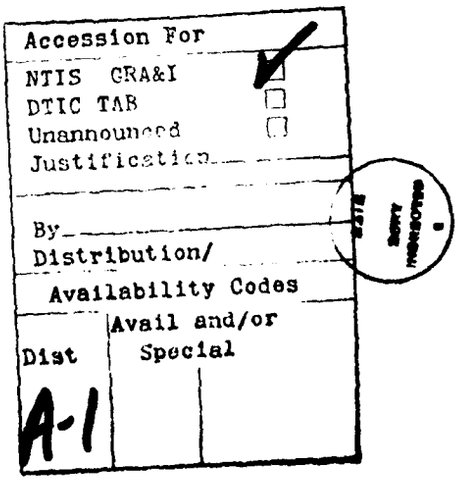
20. perceived low levels of support in their personal lives.



Over the years evidence has accrued indicating that cataclysmic events such as wars and natural disasters can exert significant impacts on the performance, health and social behavior of people involved in them. Recently, interest has focused on how less impactful events influence the lives of people. Researchers have investigated the relationship of personally significant events, such as marriage, divorce, and loss of a job to human effectiveness and happiness. There is now evidence that these types of events, like the more dramatic cataclysms, have important impacts on performance, health, and the ability to adapt to a variety of circumstances.

One of the major empirical findings concerning the effects of life changes is that their impacts are mediated by 1) individual differences (for example, personality, motivation, experiential histories and 2) environmental factors such as situational props or aids (for example, having supportive family members, coworkers and supervisors). This project was concerned with these two factors. Its major focus concerned social support as a moderator of the effects of stress. The approach taken involved development of an instrument for objective assessment of perceived social support and investigation of the effects of provided supportive conditions. The instrument tapped two dimensions: 1) the availability to an individual of persons who can be relied upon and who care and empathize with the individual, and 2) the individual's perception of his or her role in a social network. This latter dimension seems particularly important since it has been relatively neglected in the research literature.

The project's studies of experimentally provided social support showed the facilitative effects on performance of the availability of supportive

others. For example, in one study, subjects differing in test anxiety either were or were not given the opportunity to interact with a supportive other. The subjects, then, performed a complex problem solving task. Experimentally provided social support was not uniformly effective because subjects low in test anxiety did not seem to need the special support that was provided. However, subjects high in test anxiety responded very positively to the support that was provided. In fac, the highly test anxious group that received support was one of the best performing groups in the study. High test anxious subjects not given the social support performed relatively poorly and experienced high levels of cognitive interference. In another study, a similar result was found when social support was provided in the form of a communication to subjects letting them know that help, should they need it, would be available while working on a problem-solving task. None of the subjects needed the help, but simply knowing that it was available was facilitative for subjects who were experiencing relatively low levels of social support in their personal lives.

Regardless of how it is conceptualized, social support has two basic elements: available others to whom one can turn in times of need, and 2) a degree of satisfaction with the available support. The major goal of this project was the development of convenient and useful indices of these elements. The Social Support Questionnaire (SSQ) provides these indices. It has been shown to possess acceptable psychometric properties (such as good test-retest reliability and internal consistency) and seems to be useful as an assessment device. The SSQ consists of 27 items written dealing with situations in which social support might be important to people. Its items ask subjects to: 1) list persons whom they can turn to and rely on in given

sets of situations, and 2) indicate how personally satisfying these supportive others are. The SSQ yields two scores: a Number score (SSQN), the mean number of supportive persons listed for the 27 items of the questionnaire; and a Satisfaction score (SSQS), the mean satisfaction rating for the items. Research with the SSQ has indicated that this instrument is not highly correlated with the social desiriability response set, but is related to anxiety, depression and hostility. People high in social support seem to experience more positive (desirable) events in their lives, have higher self esteem, and take a more optimistic view of life than do people low in social support. In general, low social support is related to an external locus of control, lack of satisfaction with life, and difficulty in persisting on tasks which do not yield to a ready solution. The findings with regard to persistence may have implications for the productivity of certain types of work units since the failure of low social support workers to persist in certain kinds of tasks might have detrimental effects on group productivity.

Because of suggestive evidence that social support might play a role in illness, a study was conducted at the Navy Submarine School (Groton, Connecticut) in which both positive and negative life events and social support levels of its students were measured. Negative, but not positive, life events in the recent past were related to occurrences of illness. While social support by itself was not related to illness, the relationship between negative life events and illness was much stronger among students with low than with high levels of social support. Students who reported low availability of social support (SSQN), but satisfaction with the available level of support, and who also had high negative life events scores were particularly likely to become ill. The study's results suggest the importance

of assessing levels of both recent life changes and social support in investigations of psychosocial factors in illness.

Research studies were carried out in which social support was both assessed and experimentally manipulated. These studies yielded results consistent with the idea that beliefs in and expectations of self- efficacy may be related to social support. High levels of cognitive interference in low social support subjects suggest that these people may be self-preoccupied with beliefs about their low levels of ability and feelings of insecurity in social interactions and evaluative situations. Supportive manipulations (such as, an offer of help) seem to reduce feelings of impersonality and concerns about the unavailability of people on whom the individual can rely. People with low levels of social support and/or dissatisfaction with the support available to them may believe that other people are not interested in them. In this sense, the socially isolated individual is more on the spot than the individual who has ties with others. Supportive manipulations reduce perceptions of social isolation. The findings of several studies suggest that a low level of social support functions as a vulnerability factor. However, vulnerability can be reduced or eliminated through carefully planned interventions.

There would seem to be considerable value in studying situations outside the laboratory in which the roles of assessed and manipulated social support can be evaluated. The study of field situations and units of large organiza ions might prove to be especially productive. For example, for certain kinds of stressful jobs, low social support people might have vulnerabilities that would suggest a relatively low likelihood of success in carrying out assigned tasks. However, it might be possible to arrange things so as to reduce

vulnernability. This project's findings suggest that social support is a vulnerability factor about which something can be done. Further studies involving the assessment and manipulation of social support could be important, both theoretically and practically.

Since it is possible that low levels of social support are the result of relatively low levels of interpersonal skills it would be valuable to study the behavior of people differing in social support in interpersonal situations. If lack of social skills is important in social support deficiencies and if the skills can be identified, then training strategies to help individuals alter their social interaction patterns might be useful in increasing personal effectiveness levels.

Several studies were carried out in which pairs of individuals either similar or dissimilar in social support levels engaged in conversations and discussed how to solve human relations problems. These dyadic interactions were videotaped and each subject's social skills were, then, rated. In addition, the subjects made self-assessments and assessments of their partner's behavior. Subjects high in self-assessed social support scored higher than those low in social support on several measures of social skills - for example, raters described high SSQ scorers as being more likable and more effective in social behavior than low SSQ scorers. Of special interest were the high correlations found among subjects' appraisals of their own social competence, appraisals made by others, and social competence as measured by knowledge of appropriate behavior in problem situations. These results indicate that individuals' perceptions of their own social skills are consistent with the opinions of others concerning their skill levels. Not only do persons high and low in social support elicit different responses from

others, and have different opinions about their own skills, but they also seem to have different cognitions while actually in social situations. Those low in social support describe themselves as uncomfortable when looking at others directly, having problems in getting people to notice them, and lacking confidence in their ability to make friends. It seems, that social support is related to problem solving strategies and cognitive functioning, on the one hand, and social behavior, on the other.

Two important questions about social support concern its stability over time and its developmental antecedants. Studies were conducted in which social support was assessed at several time periods in the lives of college students. For periods of as long as one year, there was remarkable stability of both students' perceived availability of social support and their satisfaction with available supports. Furthermore, the correlations of these variables with involvement in University activities and social interactions were also stable. These results suggest that, regardless of its causation, social support has trait-like characteristics; that is, it seems to represent a stylistic attribute that influences a person's anticipations concerning what will happen in a social situations and his or her actual behavior in them.

With regard to possible developmental antecedents of social support levels, longitudinal studies are obviously the most desirable research strategy. Short of that, studies can be conducted in which social support levels are related to subjects' perceptions of experiences earlier in life. Using the Parental Bonding Instrument, studies were carried out in which subjects' perceptions of their parents' interest in and overprotection of them were related to current social support levels. The findings indicated clearly that, while parental over-protection is unrelated to scores on the Social

Support Questionnaire there is a highly significant relationship for both mothers and fathers between parental care, interest, and attention, on the one hand, and social support levels, on othe other. Subjects high in social support report that during pre-adolescence their parents were more actively involved in caring for them than do low social support subjects.

In an effort to delineate the behavioral and cognitive styles of subjects differing in social support, a study was carried out in which videotapes were made of dyads who responded to a human relations problem. The videotapes were rated using special scales that assessed subjects' judgment, dependability and perceived effectiveness. There were highly significant differences between male subjects differing in social support. Comparable differences did not emerge for females. Male subjects high in social support were rated as being more dependable, likely to show good judgment, friendlier, and to have more leadership ability than were low SSQ scorers. These results are consistent with other studies which showed that the social support levels of Marine Corps drill instructors were positively correlated with the performance of their platoons. High social support drill instructors appeared to be more interpersonally oriented, better as role models, and higher in leadership than low social support drill instructors. These results suggest the value of carrying out the next logical step: relating social support not only to rated effectiveness, but also to actual performance.

The projects' findings were consistent with the hypothesis that social support functions as a moderator of the effects of stress. They further showed that subjects low in social support perform at relatively low levels of effectiveness in problem solving situations and in social interactions. It was possible to devise special conditions which helped low social support

subjects improve performance.

The results of this project are consistent with the hypothesis that perceived self-efficacy is an important ingredient of various types of performance. The relatively low level of performance of subjects low in social support may be due to weak beliefs conc ng their self-efficacy. Weak self-efficacy beliefs may, in turn be out wths of a pervasive cognitive style which directs the individuals' attentio) the negative aspects of life and the consequences of failure. It would se mportant to gather more information about how people go about monitoring their behavior in situations they confront in daily life (at work, at school.) A series of studies dealing with this topic was conducted. The research showed that when subjects are encouraged to monitor their positive experiences (their successes, things that made them feel good) relatively high self-efficacy and performance levels result. On the other hand, when their attention is directed to the day to day stresses of life, poor performance and low self-efficacy result. These findings were obtained in both laboratory experients and field studies conducted at the U.S. Coast Guard Academy.

The findings of the self-monitoring studies were consistent with the idea that when subjects respond to a self-monitoring task they not only provide information about what has happened in their lives, but also are influenced by the task. What people attend to while self-monitoring influences their self concepts. The Coast Guard Academy studies suggest the value of having an organizational unit direct the attention of its members to their successes, personal growth experiences and positive attibutes. Ways of stimulating self-efficacy would seem to be an important area for basic research and practical application within organizations. Much of the anxiety and personal

unhappiness found so often in modern life and complex organizations may be due to an overemphasis of the "don't's" of life, and an underemphasis "of the do's". The self-monitoring studies suggest that psycholgical theory and human welfare might be significantly advanced with increases and knowledge about how people deal with self related attentional cues. Self-monitoring can stimulate awareness of a person's positive attributes and there, thereby influence performance and well-being.

It would be valuable in future research to link the concepts of social support, self-efficacy, and self-monitoring. Social support levels may be functionally related to self-efficacy beliefs whose strengths are influenced by different self-monitoring styles. Linking these concepts might provide needed information concerning the mechanisms that play roles in social support, social competence, and performance.

List of Technical Reports

Stressful Life Events: Measurement, Moderators and Adaptation 10/10/80
Irwin G. Sarason & James H. Johnson

Test Anxiety, Stress, and Social Support 3/2/81
Irwin G. Sarason

Life Changes and Social Support: Stress and Its Moderators 4/17/81
Irwin G. Sarason & Barbara R. Sarason

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Irwin G. Sarason, Henry M. Levine, Robert B. Basham & Barbara R. Sarason

Stress, Anxiety, and Cognitive Interference: Reactions to Tests 4/1/82
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Life Events, Social Support and Illness 8/3/82
Irwin G. Sarason, Earl H. Potter, Michael H. Antoni & Barbara R. Sarason

Concomitants of Social Support: Social skills, Physical Attractiveness and Gender 8/31/83
Barbara R. Sarason, Irwin G. Sarason, T. Anthony Hacker & Robert B. Basham

Assessed and Experimentally Provided Social Support 10/18/83
Irwin G. Sarason, Barbara R. Sarason, Karen C. Lindner

Self-Monitoring: Cognitive Processes and Performance 12/12/83
Irwin G. Sarason & Earl H. Potter

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Sarason, I.G. (1981) Test anxiety, stress, and social support. Journal of Personality, 49, 101-114.

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Sarason, I.G., Sarason, B.R., & Lindner, K.C. (manuscript in preparation) Assessed and experimentally provided social support.

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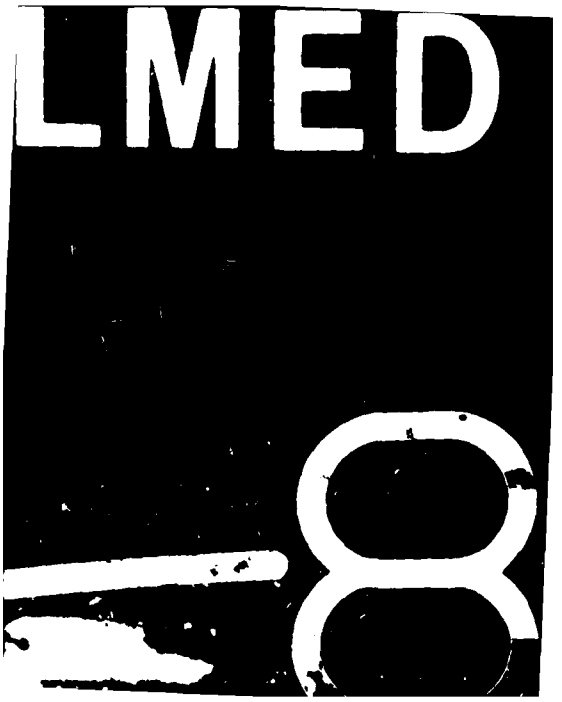
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